

Appendix D: Response to Comments for the 2021 Modification to the Phase I Municipal Stormwater Permit

National Pollutant Discharge Elimination System and State Waste Discharge General Permit for
Discharges from Large and Medium Municipal Separate Storm Sewer Systems

**STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
OLYMPIA, WASHINGTON 98504-7600**

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Introduction

This response to comments addresses the proposed modification to the Phase I Municipal Stormwater Permit that went into effect on August 1, 2019. The Washington Department of Ecology (Ecology) issues this Response to Comments (RTC) as Appendix D to the August 15, 2018 Fact Sheet that accompanied the formal drafts of the Phase I Municipal Stormwater Permit and the Western Washington Phase II Municipal Stormwater Permit, both effective August 1, 2019.

This RTC responds to comments that Ecology received on the modified draft permit that Ecology released for public comment from July 21, 2021, until 11:59 p.m. on August 27, 2021. Ecology held two hearings via webinar on the modified draft permit: one on August 24th, 2021 at 9:00a.m. and one on August 24th, 2021 at 5:00p.m. . The hearings provided the opportunity for people to give formal oral testimony and comment on the modified draft permit.

A [timeline of the history of the Municipal Stormwater General Permits and additional information](#)¹ is available on Ecology's website.

Summary of Changes

Ecology made the following changes to the final permit (note the permit references below refer to the final permit unless noted otherwise):

Appendix 10

- Ecology has clarified the intent of listed considerations for some programs, and provided more guidance as to when those programs are appropriate for use by another jurisdiction.
- The citations for several of the listed documents have been updated or corrected based on comments from those permittees.

Organization of the Response to Comments (RTC)

The table of contents lists the issues for which Ecology received comments and lists the section in which the comment and response to comments for each group of issues is located. The page numbers are provided and issues in the table of contents are hyperlinked to the specific section in this document's electronic file.

In the next section is an index that lists the name of each commenter and page numbers where their comments can be found. Where appropriate, an acronym, shortened name, or representative organization is provided to identify the commenter in this document.

¹ <https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Municipal-stormwater-general-permits/Municipal-stormwater-permit-history>

Comments and Ecology's Response

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Comments on Ecology's 2019 Stormwater Management Manual for Western Washington

Commenters: Lisa Palazzi, Charles Manning, Pierce County

Comments:

- In relation to recent published research by Tien et al (2021) from the WSU salmonid stormwater research group, it would be prudent to require that all runoff from surfaces that receive tire traffic be treated or infiltrated in such a way as to remove the tire exudate pollutants described in Tien et al 2021 and related subsequent research. This treatment requirement should include not only retrofitting or redesigning existing direct stormwater outfalls, but also requiring effective infiltration or bioswale treatment prior to outfall release to salmon-bearing surface waters. In particular, this requirement should apply equally to those waters that are currently "exempt" (such as the Puyallup River), and thus allow construction of new direct outfalls after treating only for the 6-month storm. This level of treatment is inadequate to ensure removal of the tire exudate pollutant, and these rivers are becoming more polluted with greater salmonid mortality rates over time.
To better protect water quality as well as timing of flows to surface waters, all stormwater from new development should be infiltrated in uplands, only allowing overflow during extreme rainfall events (store and infiltrate at least up to the 2-yr storm).
As an aside, I note that infiltration is not recommended in many of our shallow glacial till soils, which do infiltrate effectively prior to development. In these soils, shallow broad infiltration facilities installed above the till surface do work the great majority of the time, and should be implemented. The overall philosophical goal should be to get water back into the ground onsite, and the practical goal should be to spread many small infiltration facilities across the site, and avoid the "one large pond" stormwater management systems.

- The proposed permit adopts the 2019 Stormwater Management Manual for Western Washington. Volume III, p. 462 of the manual addresses "Inflow from Areas that Don't Require Flow Control" to flow control facilities, and states that "The performance of Flow Control BMPs can be compromised if the additional area, beyond the area that needs to be mitigated, is too large." This statement quoted from the manual is unsubstantiated, and no basis is provided in the manual for the limitation on additional inflow area to that which adds a maximum of 50% to the 100-year peak runoff to the un-detained target area runoff. In fact, it can be demonstrated using WWHM2012 that allowing additional inflow beyond the limitation specified in the manual can provide superior flow control compared to a facility sized for the target area only. The current standard should be reconsidered, and possibly suspended until the question can be investigated further. Information regarding WWHM2012 analyses that led to this conclusion is available on request.
- Please check the documents that have been put on your site for review. There doesn't appear to be any changes. The dates for all Stormwater manuals are from the previous updates in 2015 or 2016.

Response:

- Thank you for your comments. Ecology is actively participating in the science and research on the topic of tire wear and the research you cite. We are assessing needed updates to the SWMMWW or permits based on current and on-going research. The subject modification is related to Phase I Permittees local stormwater programs to meet functional equivalency with the 2019 SWMMWW.
- This is a carryover requirement from the 2014 SWMMWW, Ecology would encourage you to bring this to early input opportunities for the next manual update.
- Commenter was informed of the correct location of the modified documents.

Appendix 10

Commenter: City of Seattle

Comments:

- FN2 [footnote 2] implies that conditions are provided in Part 3 that apply to Phase I local programs. In fact, Ecology has placed no conditions on Phase I programs in this section. The permit modification states special considerations that would apply to Phase II local programs if they choose to adapt Phase I approved programs for Phase II use. Therefore, please consider revising FN2 as follows: *2 These ~~conditions~~ special considerations for Phase II local programs provide additional detail on each of the Phase I local programs and the limitations of applicability for other jurisdictions.*
Note that the Fact Sheet uses the term "Special Considerations" on Page 10.

Response:

- Language has been updated to reference 'special considerations' in Appendix 10 part 3, language has been added to some referenced programs to suggest that they are most appropriate for use within the city or county to provide additional clarification on the applicability to other jurisdictions.

Commenter: City of Tacoma**Comments:**

- The City of Tacoma is concerned that the language as written in the permit modification could pose implementation issues for the City of Tacoma. The language of concern is "The City of Tacoma's Stormwater Program is only approved for use within the City of Tacoma's city limits."

The vast majority of the City of Tacoma SWMM is applicable to projects located outside of City limits. The permit modification language as proposed by Ecology:

- Could pose implementation issues for City facilities located outside the City of Tacoma that might use operational source control BMPs.
- Could pose implementation issues for projects outside of the City that may request to connect to the City of Tacoma system.
- Gives the appearance that the City of Tacoma SWMM is not as acceptable or legitimate as other Phase I manuals.

Tacoma requests that Ecology either:

- (sic)provides written justification or clarification within the Permit Modification for the following language included in the draft Permit Modification. "The City of Tacoma's Stormwater Program is only approved for use within the City of Tacoma's city limits."

or

- (sic)updates the permit Modification language as follows:

Below the City of Tacoma suggests updates to the proposed ECY Permit Modification Language. Proposed language is shown as text edited in colored text. The City recommends that Ecology adopt language edits as provided below.

"C. City of Tacoma

City of Tacoma is meeting permit requirements S5.C.5.b.i and S5.C.5.b.ii, and achieves equivalency with Ecology's 2019 Stormwater Management Manual for Western Washington by adopting and implementing the regulations and rules listed below.

Other jurisdictions considering adopting the City of Tacoma Stormwater Management Manual July 2021 Edition must update certain language as described in Tables 10.1 and Tables 10.2.

- Per Table 10.1 – Item #87 and Table 10.2: Item #917: Any references to Flow Control Exempt Waterbodies in relation to the Puyallup River shall provide the upstream point/reach for exemption as provided in the SWMMWW – Appendix I-A: Flow Control Exempt Receiving Waters.
- Per Table 10.1 – Item #8: Minimum Requirement #5 must be updated to include guidance for areas outside the UGA as applicable.
- Per Table 10.2 – Item #89, #490: Any references to Basic Treatment Receiving Waterbodies in relation to the Puyallup River shall provide the Downstream of this Location provided in the SWMMWW – Appendix III-A: Basic Treatment Receiving Waters.
- Per Table 10.2 – Item #557: Guidance for Full Dispersion must be updated to include guidance for areas outside the UGA as applicable.
- Per Table 10.2 – Item #710: For biofiltration swale design, the K value appropriate for the individual jurisdiction must be used.

Other jurisdictions considering adopting the City of Tacoma Stormwater Management Manual July 2021 Edition must also ensure that any pre-sized BMP tables are updated or verified to ensure appropriate sizing for runoff files specific to a given jurisdiction.

These regulations and rules are only deemed functionally equivalent within the City of Tacoma limits.

1. Tacoma municipal code Chapters 12.08A “General Administration” and 12.08D “Stormwater Management”, effective July 1, 2021 (Ordinance No. 28761)
2. The City of Tacoma Stormwater Management Manual July 2021 Edition, effective July 1, 2021 (Ordinance No. 28763).”

Response:

- The City of Tacoma (COT) has achieved compliance with S5.C.5.b.i requirements with the adoption of the program listed in Appendix 10, part 3. A primary reason for allowing Phase 1 Permittees to develop their own local programs is to adapt the SWMMWW to local conditions to provide the best guidance for development within that city or county. Though other programs do not have such a defining line of appropriate use, language has been added to Appendix 10 to suggest that programs are most appropriate for use within their relative city or county. While the other Phase I programs do provide specific guidance that may only be appropriate within the city or county, those programs do provide alternatives that follows the SWMMWW guidance, whereas COT developed a more local specific manual, which is compliant with the permit requirements.
- When updating the City's manual, the City systematically removed applicable design guidance that would apply outside of City limits. During the review process, Ecology informed the COT that this may result in a limited approval of the City's manual to its use within the COT City limits, which the COT confirmed they understood. Ecology will not approve a list that attempts to identify all parts of the COT's manual where the COT systematically removed design guidance. The above list that the City of Tacoma provided with their comments is not comprehensive of all the changes a Phase 2 jurisdiction would need to make in order to adopt (a revised version of) the City's manual.
- Ecology does not agree that this could pose implementation issues for City facilities located outside the City of Tacoma that might use operational source control BMPs. If a facility is located outside of a permittee's jurisdictional boundaries, that facility should comply with the local codes and ordinances of the regulating jurisdiction.
- Ecology does not agree that this could pose implementation issues for projects outside of the City that may request to connect to the City of Tacoma system. The local codes in the jurisdiction in which the facility is being built would regulate the stormwater compliance. However, Tacoma (or any jurisdiction) has the authority to accept or decline new discharges into their MS4, and has the authority to place conditions on approval of such discharges to their MS4.

Commenter: Snohomish County

Comments:

- The adoption dates for the Snohomish County Code chapters listed in Appendix 10, Part 3, Section G for Snohomish County are not correct. Those chapters were amended by adoption of Amended Ordinance 21-025 on June 16, 2021, and became effective on July 1, 2021. In addition, Appendix 10, Part 3, Section G does not reference the County's Engineering Design and Development Standards (EDDS). Consistent with the introductory language in Appendix 10, Part 3, which acknowledges the continuing approval by Ecology of the codes, ordinances, director's rules, public rules and/or manuals listed in Appendix 10, Part 1, please add the following to Part 3, Section G for Snohomish County "4. Snohomish County Engineering Design and Development Standards, as adopted January 22, 2016, Chapters 1, 5, and 11" To implement these comments, the County recommends Appendix 10, Part 3, Section G be modified as follows (strikethrough for deletions, underline for additions):
Snohomish County is meeting permit requirements S5.C.5.b.i. and S5.C.5.b.ii, and achieves equivalency with Ecology's 2019 Stormwater Management Manual for Western Washington by adopting and implementing the regulations and rules listed below.
 1. Snohomish County Code Chapter 30.63A, as amended by Amended Ordinance No. 21-025, adopted on June ~~28~~ 16, 2021.
 2. Snohomish County Code Chapter 30.63B, as amended by Amended Ordinance No. 21-025, adopted on June ~~28~~ 16, 2021.
 3. The 2021 Snohomish County Drainage Manual, as adopted on June 28, 2021.
 4. Snohomish County Engineering Design and Development Standards, as adopted January 22, 2016, Chapters 1, 5, and 11.
- Concerning Appendix 10, Part 3, Section F regarding the WSDOT Highway Runoff Manual (2019 HRM), the second paragraph proposed by Ecology lacks clarity and could lead to confusion as to which aspects of the 2019 HRM may be used by Phase I permittees for public road projects. We assume Ecology's draft comment regarding certain thresholds and other provisions (exemptions) in the 2019 HRM that apply solely to WSDOT and are not appropriate for use by other permittees was in reference to provisions like Section 3-2.2 which contain specific language stating that the exemption is applicable only to WSDOT. (See Section 3-2.2, footnotes 1 and 2). Accordingly, the County recommends Appendix 10, Part 3, Section F be modified as follows (strikethrough for deletions, underline for additions):

The Department of Ecology completed its review of the 2019 Washington State Department of Transportation Highway Runoff Manual (2019 HRM), and found that it meets design requirements and best management practices for public road projects, equivalent to Ecology's 2019 Stormwater Management Manual for Western Washington and 2019 Stormwater Management Manual for Eastern Washington. Ecology has determined the HRM to be equivalent to both Ecology's Western and Eastern Stormwater Management Manuals for minimum design requirements and best management practices for public road projects. Permittees may adopt and employ ~~these equivalent sections (only) for use~~ the 2019 HRM for public road projects within their jurisdictions. ~~It should be noted that there are some~~ except to the extent that different thresholds, additional provisions (or exemptions) are identified in the HRM ~~that apply as~~ applying only to Washington State Department of Transportation and ~~are as~~ not appropriate for local governments to follow and implement.

Response:

- Ecology modified the language referencing the amendment to Snohomish County code.
- Ecology clarified the language to limit the use of the HRM by municipalities to sections of HRM that pertain to the design requirements and BMPs for public road projects, however did not accept the changes proposed. The Minimum Requirements from Appendix 1 of the Permit is not superseded by the HRM. There are other provisions in the HRM that are not available (or necessarily identified) to local government projects, e.g. use of a Demonstrative Approach Team for project adjustments.

Fact Sheet

Commenter: City of Seattle

Comments:

- Overall, in the Fact Sheet where feasible, please use excerpts from the Permit instead of rewriting language from Permit to avoid ambiguity and confusion.
- In this Section [page 7], the Fact Sheet states that in Appendix 10: "Part 2 – lists the significant changes to Appendix 1." Instead, per the Permit, Part 2 lists significant changes in both the Permit **and the 2019 SWMMWW**:
"Enforceable documents (including codes, ordinances, director's rules, public rules and/or manuals) must be updated and/or amended to incorporate the following *significant changes* made to applicable portions of the Western Washington Phase I Municipal Stormwater Permit (effective August 1, 2019) and the 2019 SWMMWW." Please update text in Fact Sheet to reflect that Appendix 10 lists significant changes from both the Permit and the SWMMWW.

- In this section [page 8], the Fact Sheet states that there were three main categories of changes related to the CSWGP, LID & continuous modeling, and the addition of Soil Quality and Depth to the LID Performance Standard.

Instead, there are 9 significant changes, including the addition of many Source Control BMPs and a new Wetlands Guidance requirement section, in addition to the three main category of changes listed in the Fact Sheet. Therefore, stating that there were only three main categories does not accurately reflect Appendix 10 Permit requirements. Please update the Fact Sheet so that all the “main categories” are included or just include all nine required “significant changes”.

Additionally, the Fact Sheet in this section references the Stormwater Management Manual for **Eastern** Washington. Please update text to reference Western as opposed to Eastern as follows:

“There were three main categories of changes that are required to be included in the 2019-2024 stormwater programs to be equivalent with Ecology’s Appendix 1/~~SWMMWW~~ SWMMWW update.”

Response:

- Comments noted. The Fact sheet does not get updated after it is published, but we will note this practice for the future.